

CLAIMS

1. A multilayer electronic part having a surface electrode, an internal electrode and a back electrode, wherein alternate ones of the electrodes along the thickness of the multilayer are electrically connected to each other thereby to constitute two electrode groups, the multilayer electronic part having two electrode portions for external connection which are electrically connected with said two electrode groups,
10 characterized in that said two electrode groups are electrically connected on one side surface of said multilayer electronic part.
2. A multilayer electronic part as described in Claim 1, characterized in that said multilayer electronic part is configured with a chip-like element and a flexible board attached to one side surface of said chip-like element, and alternate ones of the electrodes along the thickness of the multilayer of said chip-like element are connected to each other by
20 an electrode pattern of said flexible board thereby to constitute said two electrode groups.
3. A multilayer electronic part as described in Claim 2, characterized in that an insulative adhesive is filled in the minuscule gap between said chip-like element and said flexible board.
4. A multilayer electronic part as described in Claim 2, characterized in that said two electrode portions for external connection are formed on one side

surface of said chip-like element or the extension of said one side surface.

5. A multilayer electronic part as described in Claim 4, characterized in that said two electrode portions for external connection are formed of the end portions of a pair of said electrode patterns of said flexible board.

6. A multilayer electronic part as described in Claim 2, characterized in that each of said electrodes of said chip-like element and said electrode pattern of said flexible board are connected to each other by a thick film conductive paste or a solder or an anisotropic conductive sheet.

7. A multilayer electronic part as described in Claim 2, characterized in that an insulation pattern for cutting off the conduction between adjacent electrodes along the thickness of the multilayer of said chip-like element is formed on said chip-like element or said flexible board.

20 8. A method of manufacturing a multilayer electronic part configured with a chip-like element having a surface electrode, an internal electrode and a back electrode and a flexible board attached to one side surface of said chip-like element, wherein alternate ones of the electrodes along the thickness of a multilayer of said chip-like element are electrically connected to each other by an electrode pattern of said flexible board thereby to constitute two electrode

groups, and two electrode portions for external connection which are electrically connected with said two electrode groups are formed of the electrode pattern of said flexible board or a conductive portion 5 connected to said electrode pattern;

said method comprising the steps of cutting out a bar-shaped subbase member as wide as one chip from the base member of said chip-like element, electrically connecting alternate ones of the 10 electrodes along the thickness of said bar-shaped subbase member with each electrode pattern of said flexible board base member including a multiplicity of electrode pattern pairs by fixedly connecting said flexible board base member to the longitudinal side 15 surface of said bar-shaped base member, and cutting out each multilayer electronic part from an integrated member of said bar-shaped subbase member and said flexible board base member.

9. A method of manufacturing a multilayer 20 electronic part as described in Claim 8, characterized in that said manufacturing steps are carried out with other members attached to the upper and lower surfaces of the base member of said chip-like element.

10. A method of manufacturing a multilayer 25 electronic part as described in Claim 8, characterized in that an insulative adhesive is filled in the minuscule gap between said bar-shaped subbase member and the base member of said flexible board with said

bar-shaped base member and said base member of said flexible board integrated with each other.

11. A method of manufacturing a multilayer electronic part as described in Claim 8, characterized in that each of said electrodes exposed to the long side surface of said bar-shaped subbase member is plated for connection assistance.

12. A method of manufacturing a multilayer electronic part as described in Claim 8, characterized in that an insulative pattern for cutting off the conduction between the adjacent electrodes along the thickness of the multilayer of said bar-shaped subbase member is formed on said flexible board.

13. A two-dimensionally arrayed element packaging structure characterized in that a plurality of electronic parts are integrated by being arranged in columns and rows in a two-dimensional array as a module, wherein each of said electronic parts is configured with a chip-like element having at least a surface electrode and a back electrode and a flexible board attached to one side surface of said chip-like element, the surface electrode and the back electrode of said chip-like element are electrically connected to a corresponding electrode pattern of said flexible board, and two electrode portions for external connection which are electrically connected to said surface electrode and said back electrode are formed of the electrode pattern of said flexible board or a

conductive portion connected with said electrode pattern.

14. A two-dimensionally arrayed element packaging structure as described in Claim 13, characterized in
5 that each of said electrodes of said chip-like element and said electrode pattern of said flexible board are connected to each other by a thick-film conductive paste or a solder or an anisotropic conductive sheet.

15. A two-dimensionally arrayed element packaging structure as described in Claim 13, characterized in
10 that said chip-like element is a single-layer structured element having only a surface electrode and a back electrode or a multilayer structured element having a surface electrode, an internal electrode and a
15 back electrode.

16. A method of manufacturing a two-dimensionally arrayed element packaging structure, characterized in
that only a plurality of acceptable ones of the multilayer electronic parts as described in any one of
20 Claims 1 to 7 or only a plurality of acceptable ones of the multilayer electronic parts manufactured by the manufacturing method as described in any one of Claims 8 to 12 are integrated by being aligned in columns and rows thereby to complete a two-dimensionally arrayed
25 module.